

SOME REMARKS ON THE SĪTĀDHYAKṢAPRAKARAṆA
OF THE ARTHAŚĀSTRA

The economy of the Mauryas similarly to the neighbouring Seleucids was mostly based on agrarian revenue, and the private estate of the king (*sītā*) represented a very important category of land in this economic system¹. Accordingly a sound interpretation of the relevant chapter the *Arthaśāstra* (*sītādhyakṣaparakaraṇa*: *ArthŚā* II, 24.) the most important source of Maurya economy is a very urgent task². Although this chapter has been frequently cited in the secondary literature there is much confusion surrounding the technical terms in it.

Fortunately since the appearance of Kangle's translation³ many scholars have discussed and explained a great deal of terms of economic and social nature⁴.

¹ R. THAPAR, *The Mauryas Revisited*, Calcutta, 1987, p. 47.

² E. H. JOHNSTON, "Two Studies in the Arthaśāstra of Kauṭilya", in *JRAS*, 1929, p. 77-102 (in part. 90).

³ R. P. KANGLE, *The Kauṭilya Arthaśāstra, Part II. An English Translation with Critical and Explanatory Notes*, Bombay, 1963.

⁴ E. RITSCHL, M. SCHETELICH, "Zu einigen Problemen der Eigentumsverhältnisse (speziell an Grund und Boden) im Kauṭilya Arthaśāstra", in *MIO* 11.2. (1966), pp. 319-337; G.M. BONGARD-LEVIN, "K probleme zemel'noy sobstvennosti v drevney Indii", in: *VDI* 2 (1973), pp. 12-13; L. GOPAL, *Aspects of History of Agriculture in Ancient India*, Varanasi, 1980, pp. 171-77; M. NJAMMASCH, *Untersuchungen zur Genesis des Feudalismus in Indien*, Berlin, 1984, p. 56; A.A. VIGASIN, A.M.

Technical terms concerning technical issues in the practice of agriculture that form part of duties of the *sītādhyakṣa* as well as the evaluation of the level of technical development described in this chanter hitherto resisted to a prompt treatment. Even M.S. Randhawa a too rank expert in husbandry uncritically records the data taken from R. Shamasastri's outdated translation⁵. Altogether a meticulous research in these terms and in the possible sources of the contents of this chapter cannot be postponed.

The later problem is particularly intrinsic therefore it is touched upon by some eminent researchers. Johnston says that the *Arthaśāstra* is in essence the work of a practical administrator⁶. Breloer opines that Kauṭilya took help of assistants who collected the material and he himself edited it⁷. According to Kangle "he probably derived material from manuals... written before his days that have not come down to us"⁸.

We are caught on the horn of dilemmas just in the first sentence:
*sītādhyakṣaḥ kṛṣitantraśulbavṛkṣāyurvedajñas tājñīśakho vā
 sarvadhānyapuṣpaphalaśākakandamūlavāllīyakṣaumakārpās
 bījāni yathākālāṃ grhṇīyāt.*

It is translated by Meyer thus: "Der Ackeraufseher kundig des Ackerbaues und der Pflege der Bäumen und Sträuchern oder mit solchen verbunden, die sich auf diese Dinge verstehen, soll die Samen von allen Getreidearten, Blumen, Früchten, Gemüsen, Knollen, Wurzeln, Rauhengewächsen, Flachs und Baumwolle, je nach ihrer Zeit, einsammeln"⁹. Kangle renders it so: "The Director of Agriculture, himself conversant with the practice of agriculture, water divining and the science of rearing plants, or assisted by

SAMOVANTSEV, *Arthashastra. Problemi sotsial'noy strukturi i prava*, Moskva, 1984, p. 161; R. THAPAR, *Interpreting Early India*, Delhi, 1993, p. 121 etc.

⁵ M.S. RANDHAWA, *A History of Agriculture in India*, Vol. I, New Delhi, 1980, pp. 360-364.

⁶ E.H. JOHNSTON, *op. cit.*, p. 89.

⁷ B. BRELOER, *Kauṭilya Studien*, Bd. III, Leipzig, 1934, p. 10.

⁸ R. P. KANGLE, *The Kauṭilya Arthaśāstra. Part III, A Study*, Bombay, 1965, p. 55.

⁹ *Das altindische Buch vom Welt- und Staatsleben. Das Arthaśāstra des Kauṭilya. Aus dem Sanskrit übersetzt...* von J.J. MEYER, Leipzig, 1926, p. 177.

experts in these should collect, in the proper seasons, seeds of all kinds of grains, flowers, fruits, vegetables, bulbous roots, creeper fruits, flax and cotton”¹⁰.

It is striking that both translators fall short in rendering the term *sītādhyakṣa* in a satisfactory manner. The correct meaning of the word can be “superintendent of agriculture (of crown lands)”¹¹; “officer in charge of the king’s Khās Mahāl”¹²; “Aufseher über das königliche Landeigentum”¹³; “nadziratel tsarskih polei”¹⁴. Both Meyer and Kangle fail to grasp the proper meaning of the term *kṛṣitantra* a word hard to explain indeed. The only known attestation reads thus: *kaccitte kṛṣitantreṣu goṣu puṣpaphaleṣu ca/dharmārthaṃ ca dvijātibhyo diyate madhusarpiṣi*. (MahaBha II, 5, 106.) The Sanskrit lexicons correctly give the meaning of the compound in this context as “the fruits of the field”¹⁵ or “Feldfrüchte”¹⁶. Unfortunately this interpretation does not help us at all. J. C. Roy is also in error in taking it as a synonym of the proper names Kṛṣiparāśara or Kṛṣisaṃgraha because not any extant manuscript of this agricultural treatise bears that title. It looks like better to take *tantra* as “system, theory, scientific work”¹⁷ and then translate the whole compound either as “the system of agricultural science” or as “a scientific work on agriculture”. R.P. Das happily puts it as “das wissenschaftliche System (mit seinen Fachtexten) der Landwirtschaft”¹⁸. We can but wonder why Kangle who is stuck to Bhaṭṭasvamin’s commentary in most cases does not follow it here. The explanation of the commentary is plain: *kṛṣitantraṃ*

¹⁰ R.P. KANGLE, *The Kauṭīliya Arthaśāstra, Part. II. An English Translation with Critical and Explanatory Notes*, p. 148.

¹¹ V.S. AGRAWALA, *India as Known to Pāṇini*, Varanasi, 1963, p. 196.

¹² D.C. SIRCAR, *Indian Epigraphical Glossary*, Delhi-Varanasi-Patna, 1966, p. 313.

¹³ M. NJAMMASCH, *op. cit.*, p. 84.

¹⁴ A.A. VIGASIN, A. M. SAMOZVANTSEV, *op. cit.*, p. 35.

¹⁵ W. MONIER-WILLIAMS, *A Sanskrit-English Dictionary*, Oxford, 1960, p. 306.

¹⁶ *Nachträge zum Sanskrit Wörterbuch in kürzerer Fassung*, von O. BÖHTLINGK, Bearbeitet von R. SCHMIDT, Hannover-Leipzig, 1924-1928, p. 154.

¹⁷ W. MONIER-WILLIAMS, *op. cit.*, p. 436.

¹⁸ *Das Wissen von der Lebensspanne der Bäume. Surapālas Vṛkṣāyurveda*. Kritisch ediert, übersetzt und kommentiert von R.P. DAS, Stuttgart, 1988, p. 1, note 4.

vr̥ddhaparāśāradipraṇītaṃ kṛṣīśāstram: “*kṛṣitantra* is the system of agricultural science represented by *Vṛddhaparāśara* and others”. Kauṭilya might have used the term in this sense without the specification: this is represented by *Vṛddhaparāśara* and others. *Parāśara* and his school belong to the mediaeval times falling in the scope of *Bhaṭṭasvāmin*’s knowledge.

The following passage of his commentary is rather turbulent. It can be due to the fact that he perhaps uncritically used the statement of previous commentators whose works had been lost¹⁹. The passage reads thus: *sīrājñānaṃ daśāśālādi vr̥kṣāyurvedo ’gniveśyādi-praṇītaḥ*. “The *sīrājñāna* is presented by *Daśāśālā* and others and the *vr̥kṣāyurveda* by *Agniveśa* and others”. It is a pity that we do not know who *Daśāśālā* is and what the word *sīrājñāna* means. In this connection R.P. Das makes useful suggestions. In his view *sīrājñāna* is perhaps identical with *sīrajñāna* (?) or by a slip of the pen with *sītājñāna* (?) and occasionally *sīra* or *sītā* stands here as a variant of *gulma* or *śulba* of the *Arthaśāstra* manuscripts²⁰. We subscribe to the first half of this hypothesis because *sīrajñāna* “the knowledge of the plough” or *sītājñāna* “the knowledge of the furrow” are meaningful. The problem with the remaining part of the hypothesis is that these meanings stand very close to the technical term already occupied by *kṛṣitantra*. So this locus remains obscure until more evidence becomes available.

The items *gulma* and *śulba* also pose problems here. Meyer chooses *gulma* while Kangle prefers to *śulba* in his critical edition of the text. On the ground of the commentaries Cb and Cj Kangle renders it as “water divining”. His version is adopted by J. Laping, too²¹. We consider this translation purely conjectural because there is no credible textual evidence from the period surely preceeding the age of the composition of the *Arthaśāstra* or even from the following centuries that could prove it. Even in the early mediaeval

¹⁹ Cf. L. GOPAL, *op. cit.*, p. 30.

²⁰ R.P. DAS, *op. cit.*, p. 1, note 4.

²¹ J. LAPING, *Die landwirtschaftliche Produktion in Indien. Ackerbau-Technologie und traditionale Agrargesellschaft dargestellt nach dem Arthaśāstra und Dharmaśāstra*, Wiesbaden, 1982, pp. 74-75.

Ṛkṣāyurveda of Sūrapāla the word evidently denotes “land-measuring” “Messkunst in Bezug auf Feldmessung”²². This kind of practical knowledge well fits one of normal duties of the *sītādhyakṣa*. On the other hand water-divining is a quasi-magical act performed by religious specialists. The normal term that signifies this activity *dakārgala* (BrSam LIV, 125 with Bhaṭṭotpala’s commentary and KKSū 150) is an unexplained word itself. Meyer’s reading *gulma* also supported by manuscripts is clearly beside the point.

Adhering to Bhaṭṭasvamin Kangle ascribes *ṛkṣāyurveda* to Agniveśa but to our best knowledge not any text is extant under his name²³. The spurious work attributed to him by Raghunath Singh²⁴ cannot be traced²⁵.

The term *karṣanayantra* is a *hapax legomenon* in Sanskrit literature. Meyer translates it as “Maschine”, while Kangle boldly renders it as “ploughing machine”. Gaṇapati Śāstri takes it as a collective term for the plough, various tools and the manpower employed in agricultural work²⁶. Raghunath Singh understands it as a plough together with its accessories²⁷. The later statement can be easily refuted: ploughs even the sophisticated ones consisting of several parts are called *hala* or *lāṅgala* (AmaK II, 9, 13-14; KṛṣiPa 112-113; MānaSā V, 56-57; BṛhatPaSm *adhyāya* 3; KṛṣiSā VII, 54-68 etc.) and never *yantra*. The name for the wholeness of the accessories of the plough is called *sāmagrī* (KṛṣiPa 112) and *dravya* (KKSū 246) denotes the plough and the other agricultural tools. In general Gaṇapati Śāstri’s standpoint is feasible if we take *karṣaṇa* as

²² R.P. DAS, *op. cit.*, p. 56.

²³ Cf. *An Encyclopedic Dictionary of Sanskrit on Historical Principles*, Poona, 1976, I./2, p. 386.

²⁴ *Kauṭīliyam Arthaśāstram. Original text translation in Hindi with historical, geographical and cultural notes* by RAGHUNATH SINGH, Part I, Varanasi, 1983.

²⁵ R. P. DAS, *op. cit.*, p. 1, note 4.

²⁶ *Kauṭīliyam Arthaśāstram of Āchārya Viṣṇugupta. With four commentaries. Śrīmūlā* by T. GAṆAPATI ŚĀSTRĪ, Varanasi, 1991.

²⁷ *Kauṭīliyam Arthaśāstram. Original text translation in Hindi with historical, geographical and cultural notes* by RAGHUNATH SINGH, Part I, Varanasi, 1983.

“cultivated land”²⁸ and *yantra* “instrument, implement etc.”²⁹ in the broadest sense. In specialised meaning the word occurs in such compounds as *karayantra* “syringe” (KuṭṭiMa 684), *ghaṭīyantra* “water lifting device” (AmaK II,10,28 etc.) and *srotayantra* (ArthŚā II.24.18). The case of a late interpolation bringing a modern term also cannot be ruled out. Anyhow we must suspend our investigation until we get further linguistic material from technical texts.

Few reflections need to be added to the verse ten. It reads as follows: *vātamātapayogaṃ ca vibhajan yatra varṣati/trīn karīṣāṃca (karṣakāṃśca) janayamstatra sasyāgamo dhruvaḥ*. In Meyer’s rendering: “Wo (der Regengott)m Wind und Sonnenglut beigabe richtig verteilend, regnet und drei Pflügungen ermöglicht, da gibt es sicheren Ernteertrag”. Kangle translates it thus : “Where it rains distributing wind and sunshine properly and creating three (periods for the drying of) cowdung cakes, there the growth of crops is certain”. The translation of the first line can be fully approved. The interpretation of the second depends on the reading accepted. Kangle’s choice can be grammatically justified, however, we feel here semantical problems. Having monitored Indian literature on weather forecast we have not found such symptoms of favourable season for good crops. On the contrary the information inherent in Meyer’s rendering is in agreement with living practice in India: in order to make sufficiently deep furrows three ploughings are recommended, (*triguṇākṛta* etc.: AmaK II,9,9 and in modern times³⁰. At the same time it is regrettable that Meyer’s reading raises grammatical problems. Namely the terms for “ploughing” are *karṣa* (p IV,4,97; YājñSm II,217; AmaK III,3,22) or *karṣaṇa* (ManuSm IV,5) but never *karṣaka*. It can be explained if we take the diminutive suffix *-ka-* without special meaning here or suppose it to stand for metrical reasons but we must confess that both ideas are

²⁸ W. MONIER-WILLIAMS, *op. cit.*, p. 260; V.S. APTE. *The Practical Sanskrit-English Dictionary*, ed. by P.K. GODE and C.G. KARVE, Poona, 1957, p. 543.

²⁹ W. MONIER-WILLIAMS, *op. cit.*, p. 845; V.S. APTE, *op. cit.*, p. 1304.

³⁰ H.M. ELLIOT, *Memoirs on the History, Folk-lore and Distribution of the Races of the North-Western Provinces of India*, Vols. I-II, London, 1869, p. 304.

slightly strained. At present we support Meyer without excluding further discussions.

The *mantra* recited at the time of sowing is very remarkable for many aspects. It reads in the critical edition so: *prajāpataye kāśyapāya devāya ca namaḥ sadā / sītā me ṛdhyatām devī bījeṣu ca dhaneṣu ca*. It should be noted that Meyer calls the verse defective. He amends *prajāpataye* for *prajāpatye* and on the basis of some manuscripts read *devalāya namaḥ sadā*. Kangle notices that the first line is hypermetric. Constituting the critical text as we have seen he rejects Meyer's emendation of *prajāpataye* for *prajāpatye*. It is also not negligible circumstance that the origin of the *mantra* is unknown³¹. Meyer tries two times to translate it. The first one reads thus: "Verehrung dem Prajāpati, dem Kāśyapa, dem Gotte! Möge immerdar Sītā (der Genie der Ackerfurche und des Ackerbaues) gedeihen in meinen Feldfrüchten und Gütern!"³². The second one is as follows: "Verehrung immerdar dem Prajāpati Kāśyapa Devala! Möge Sītā, die Göttin, gedeihen in meinen Saatfrüchten und Gütern!"³³. Kangle renders it thus: "Salutation to Kāśyapa the lord of creation and to the god (of rain) always. May the divine Sītā prosper in my seeds and my grain"³⁴.

In the first line the possibility of variant readings deserves special deliberation. Meyer regards Devala Kāśyapa a genius of agriculture and makes attempt at the identification of it with Udālaka Kāśyapa an unknown god of agriculture invoked at the time of harnessing the plough (*lāṅgalayojana*: PāraskaraGS II,13)³⁵. Meyer himself is not free from doubts and puts here a question mark. To make the conjecture plausible he is looking for more textual evidence. Doing so he quotes a passages from the *Viṣṇudharmottarapurāṇa* where the name Devala Kāśyapa can be

³¹ J. LAPING, *op. cit.*, p. 108.

³² *Das altindische Buch vom Welt- und Staatsleben. Das Arthaśāstra des Kauṭīlya. Aus dem Sanskrit übersetzt...* von J.J. MEYER, S. 183.

³³ *Ibid.*, S. 137.

³⁴ R. P. KANGLE, *The Kauṭīliya Arthaśāstra*, Part. II, p. 152.

³⁵ J. J. MEYER: *Trilogie altindischer Mächte und Feste der Vegetation*, Zürich-Leipzig 1937, p. 157, note 1.

attested. (Viṣṇuḍha UP II,82,24-25.) We can also refer to a passage of the *Gṛhastharatnākara* where at the commencement of ploughing Kāśyapa is invoked together with Brahmā, Viṣṇu, Rudra, Parjanya and other deities³⁶. The eminent role of Kāśyapa as a cultural hero who made the Kashmir valley fertile (NīlāmaP 300 ; RājTa V, 109 and V, 113) and the existence of a famous treatise on agriculture under the alleged authorship of Kāśyapa (*Kāśyapīyakṛṣisūkti*) bear the testimony of an old tradition about Kāśyapa god, or demi-god who presides over agriculture. The evidence for a Devala Kāśyapa is notwithstanding very feeble so Meyer's reading and interpretation remain on the level of a thought-provoking conjecture. Kangle's text also evokes feeling of uncertainty. He simply identifies Kāśyapa with the lord of creation (Prajāpati) and separates them from the word *deva*. The identification is theoretically possible³⁷. Of course it is not obligatory: in the list of gods in the *Gṛhastharatnākara* Brahmā (=Prajāpati), Kāśyapa, Parjanya (=Indra) evidently fulfil different "duties". In the light of that Kangle's translation "god (of rain)" looks like too farfetched. The last word cannot be said unless the origin of the *mantra* will be found and the meaning assessed. It is another question what do the single names of gods in the time of this original source and how it changed by the age of the compilation of the *Arthaśāstra*.

Amazingly takes Meyer *bijeṣu* as "in meinen Feldfrüchten" and later as "in meinen Saatfrüchten". We are at a loss here all the more because among others the meaning "Saatkorn" is given for *bīja* in the Petersburger Wörterbuch³⁸ that perfectly fits the context. Not less surprisingly Kangle renders *dhana* as "grain". The word has not this meaning in any Sanskrit text moreover there is the proper word *dhānya* in the beginning of this chapter. It is unnecessary to restrict Sītā's functions to make seeds and grains prosper. She is also the

³⁶ *Gṛhastharatnākara* by CAṆḌ EŚVARA SHAKKURA. Ed. by MAHĀMAHO-PĀDHYĀYA Kamalakṛṣṇ A SMṚTITIRTHA, Calcutta, 1928, p. 432.

³⁷ O. BÖHLINGK, *Sanskrit Wörterbuch in kürzerer Fassung*, St Petersburg, 1879-1889, II, p. 40.

³⁸ *Ibid.* IV, p. 226.

goddess of general prosperity who bestowes goods and richness to men. Therefore *dhaneṣu* would simply mean “in goods”. Keeping all this in mind we tentatively render the *mantra* so: “Salutation to Prajāpati and the god (or: divine) Kāśyapa always. May goddess Sītā prosper in my seeds and goods!”.

From the analysis of the relation between the basic text and that of Bhaṭṭasvāmin it comes that it is often wrong to view things through commentarial glasses because one might lose sight of the original meaning. It is also improper way of interpretation to read into Kauṭilya the opinions of those authorities who might have stood only at Bhaṭṭasvāmin’s disposal. With other words all translations in future should not cling to Bhaṭṭasvāmin as it Kangle does. Instead of that we have to do our utmost best to find out the correct usage of terms in texts that approximately date from the centuries around the time of editing the *Arthaśāstra* a date so much debated. This task is extremely difficult but perhaps not unsoluble. We think that it is conceivable that Kauṭilya mostly derived his knowledge from the practice of agriculture prevailing in his day. This way of compiling treatises is not uncommon in India. The excellent books called *Kṛṣiparāśara* and *Kāśyapīyakṛṣisūkti* reflect the deep knowledge of practice in the mediaeval times. A fine example is Daśarathaśāstri, the compiler of the twentieth century *Kṛṣiśāśana* who profoundly uses both classical Sanskrit sources and his own experiments gained from agricultural work combined with experiments of his co-villagers and neighbours³⁹. Bhaṭṭasvāmin’s commentary must be independently evaluated in the frame of mediaeval Indian agriculture in an age that witnessed a so-far unseen phenomenon the codifying of the existing practical knowledge in textbooks both in Sanskrit and in vernacular languages.

³⁹ Cf. G. WOJTELLA, “Notes on Daśarathaśāstrin’s *Kṛṣiśāśana*”, in *ABORI* 72-73 (1991-1992) “Amṛtamahotsava (1917-1992) Volume”, p. 527.